

REMARKS

Applicant appreciates the interview granted by Patent Examiner Francis M. Legasse, Jr. on July 21, 2009.

During that interview the July 10, 2009 office action, the claims 5-18 and 21-23, the five cited patents, the specification and the drawings were discussed.

It was agreed that the drawings requirement on page 2 and 3 of the office action was fulfilled by element 79 in Figures 2-15 and no further change was necessary.

It was agreed that no prior art reference taught the micro bends of the cross over points of the optical fibers. That feature is recited in each of the independent claims.

In addition, no reference teaches the adhesive coating on the fibers, curing on the tank for adhering and ruggedizing the filers and the helical winding in first and second opposite directions and the squeezing of the fiber between the tank and strengthening wrap and the deforming the micro bend pinch points as the tank liner is pressurized of claim 5.

No reference teaches the securing of the first and second helical coils to the tank of claim 6 or securing the micro bend pinch points with adhesive of claim 7.

No reference teaches the micro bend pinch points of claim 8 or the first and second helical windings in first and second directions forming micro bend pinch points of claim 9, the isolator layer of claim 10, the filament windings over the isolator layer of claim 11, the coating the optical fiber with a settable adhesive while winding the fiber of claim 12, the settable adhesive coating of the cross over micro bend pinch points of claim 13, or the increasing of micro ending with resisting pressure of the expanding tank with the filament windings of claim 14.

No prior art teaches the micro bends of claim 15, the thin adhesive connecting the optical fiber to the tank of claim 17 relatively flexible adhesive at the optical fiber micro bend pinch points of claim 18.

No prior art teaches the micro bend pinch points of the crossed first and second helixes cross over point or the squeezing the pinch points between the liner and the outer strength providing layer of claim 21.

No prior art teaches the squeezing of the micro bend pinch points diminishing transmission of claim 22 or the inverse relation of light intensity and tank pressure of claim 23.

Each of the claims is new, unobvious and allowable.

Furuichi teach impact sensitive rubber coated optical fibers to sense impact for releasing gel upon impact. No micro pinch points are involved.

Tamura teaches a composite carbon fiber 24 and dome shaped protective layer 23, Figure 2, col. 5, lines 25-40, which are not related to the invention.

Watanabe simply teach an aluminum liner.

Innocenti teaches expensive Bragg grating reflectors in a single helix without crossovers and only one exposed end and leads away from the invention.

Hopenfeld teaches fluid sensitive epoxy 52 which is washed away with its light reflective particles 50, Figure 2, col. 4, lines 53, 54 and has nothing to do with the invention.

The invention is new and unobvious. New and unobvious features of the invention are set forth in the claims. The new and unobvious features set forth in the claims are neither found in nor suggested by the prior art.

CONCLUSION

Reconsideration and allowance are requested.

Respectfully,



James C. Wray, Reg. No. 22,693
1493 Chain Bridge Road, Suite 300
McLean, Virginia 22101
Tel: (703) 442-4800
Fax: (703) 448-7397

July 24, 2009